IN THE CLAIMS:

Please cancel claims 1-19 without prejudice or disclaimer of the subject matter thereof.

The following is a complete listing of claims in this application.

Claims 1-19 (canceled)

20. (new) Apparatus for displaying, measuring the size of and counting individual inclusions in suspension in a flow of liquid metal, comprising:

ultrasound sensor means comprising at least one emission means for emitting ultrasound beam pulses and at least one reception means for detecting reflected ultrasound beam pulses,

an echo acquisition and processing device for reflected ultrasound beams received by the at least one reception means,

a display device for displaying echos as images of inclusions,

an image analysis device to count and measure inclusions based on the displayed images, and

means for calibrating the apparatus with respect to inclusion size, comprising at least one control reflector having predetermined dimensions and geometry stable over time, and means for selectively placing the at least one control reflector in a path defined by the ultrasound beam pulses.

21. (new) Apparatus according to claim 20, wherein said at least one control reflector comprises a rod of known diameter.

22. (new) Apparatus according to claim 21, wherein said rod has an end which is a flat surface.

23. (new) Apparatus according to claim 20, wherein each of said at least one emission means comprises an emitting probe and each of said at least one reception means comprises

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a receiving probe.

24. (new) Apparatus according to claim 20, wherein said at least one emission means and said at least one reception means are grouped in an emission/reception probe which performs emission and reception functions.

25. (new) Apparatus according to claim 20, wherein said ultrasound sensor means is constructed and arranged to probe the liquid metal flow over its entire width.

26. (new) Apparatus according to claim 25, comprising a plurality of emission and reception means with a delay line, side by side or staggered through the liquid metal flow.

27. (new) Apparatus according to claim 25, wherein the sensor means has the width of said flow, and each emission and reception means comprises a multi-element translator comprising several contiguous piezoelectric transducers prolonged by a delay line that is also adapted to the flow width of the liquid metal.

28. (new) Apparatus according to claim 27, additionally comprising an electronic emission and reception control means to scan and focus the ultrasound beam pulse.

29. (new) Apparatus according to claim 20, wherein the at least one control reflector comprises a plurality of rods.

30. (new) Apparatus according to claim 29, wherein each of the plurality of rods has a different diameter.

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